



Z

Rainbow Clock with 8 Soothing Sounds and FM Radio

**MODEL: RRM902 / RRM902U /
RRM902A**

USER MANUAL

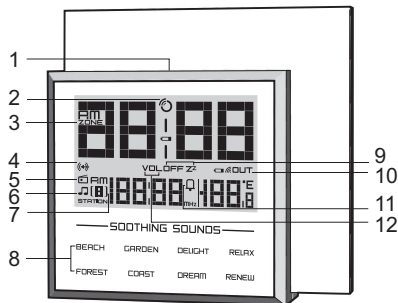
INDEX

Overview	2
Front view	2
Back view	2
Bottom view	3
Remote sensor.....	3
Getting started.....	3
Power supply	3
Remote sensor	4
Sensor data transmission	4
Clock	5
Clock reception	5
Manually set clock.....	5
Audio options	6
Soothing sounds	6
Radio.....	6
Music from external audio device	7

Volume control	7
Alarm	7
Color play.....	8
Sleep timer.....	8
Temperature.....	8
Backlight.....	8
Reset	8
Specifications	9
Precautions.....	9
About Oregon Scientific	10
EU Declaration of conformity.....	10
FCC Statement	10

OVERVIEW

FRONT VIEW



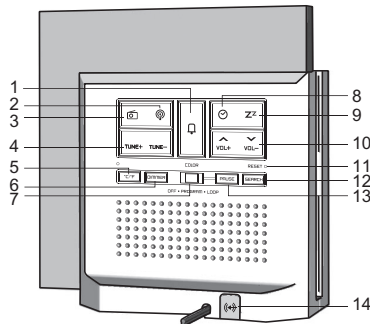
- 1. SNOOZE · SOUND:** activate snooze alarm; turn soothing sound on / off; select soothing sound
- 2.** clock signal reception indicator
- 3. ZONE:** time zone offset
- 4.** external audio device successfully connected
- 5.** radio is on
- 6.** soothing sound is on
- 7.** radio station selected (user can set up to 8 stations); soothing sound selected for alarm option
- 8.** Name of soothing sound selected is displayed
- 9.** OFF Z² sleep function enabled (Z²) / disabled (OFF Z²)

10. **OUT:** remote sensor reception indicator

11. : daily alarm is on

12. VOL: volume level is displayed




BACK VIEW



- 1.** : activate / deactivate alarm function; set alarm; view alarm status (when radio is on)
- 2.** : toggle station number (when radio is on); save radio frequency
- 3.** : turn radio on / off
- 4. TUNE +/-:** auto search / adjust radio frequency
- 5.** °C / °F: user selectable temperature units



Z

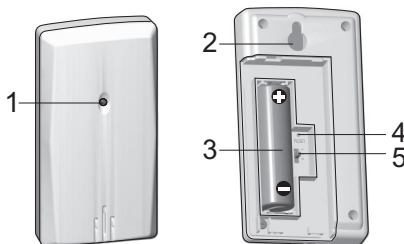
6. **DIMMER**: select display brightness
7. **COLOUR (OFF-PROGRAM-LOOP)**: activate / deactivate color-changing light show; select pre-programmed (sound specific) light show or rainbow loop effect
8. : set clock
9. **Z²**: activate sleep timer; adjust timer settings (120, 90, 60, 30, 15, 0)
10.  **VOL+** /  **VOL-**: increase / decrease value of the setting; increase / decrease volume
11. **RESET**: reset unit to default settings
12. **SEARCH**: initiate sensor search
13. **PAUSE**: select a specific color lighting; restart color-changing effect
14. Socket for audio line-in

BOTTOM VIEW



1. Adapter socket
2. Battery compartment

REMOTE SENSOR



1. LED status indicator
2. Wall mount hole
3. Battery compartment
4. **RESET** hole: reset unit to default settings
5. **CHANNEL** switch: select Channel 1

GETTING STARTED

POWER SUPPLY

Adapter

The adapter powers the unit. Plug adapter into socket, making sure the adapter is not obstructed and is easily accessible to the unit.

To completely disconnect from power, the adapter should be disconnected from the main unit.




NOTE The main unit and adapter should not be exposed to wet conditions. No objects filled with liquid, such as vases, should be placed on the main unit and adapter.

1 x CR2032 battery for memory back-up

To insert batteries:

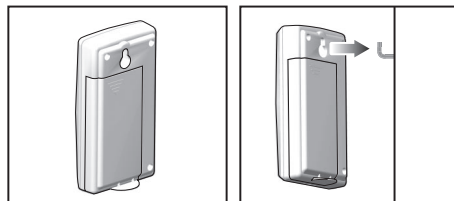
1. Remove the battery compartment cover.
2. Insert the battery, matching the polarities.
3. Press **RESET** after each battery change.

 LOCATION	MEANING
Clock area	Main unit batteries low
Outdoor temperature area	Sensor batteries low

REMOTE SENSOR

To set up the remote sensor:

1. Slide open the battery compartment.
2. Slide channel switch to select channel 1.
3. Insert the battery, matching the polarities.
4. Press **RESET** after each battery change.
5. Close the battery compartment.
6. Press and hold **SEARCH** on main unit to initiate search and start receiving time and temperature data from the sensor.
7. Place the sensor within 30 m (98 ft) of the main unit using the table stand or wall mount.



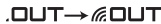
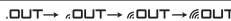

TIP The transmission range may vary depending on many factors. You may need to experiment with various locations to get the best results.

NOTE Use alkaline batteries for longer usage and consumer grade lithium batteries in temperatures below freezing.

SENSOR DATA TRANSMISSION

Outdoor sensor:

The sensor reception icon in the remote sensor area shows the status:

ICON	DESCRIPTION
	Main unit is searching for sensor(s)
	A channel has been found
	The sensor cannot be found



2

NOTE If the sensor is not found, check the batteries, obstructions and remote unit location. Press and hold **SEARCH** to force another sensor search.

For best results:

- Place the sensor out of direct sunlight and moisture.
- Position the sensor so that it faces the main unit, minimizing obstructions such as doors, walls and furniture.
- Place the sensor in a location with a clear view to the sky, away from metallic / electronic objects.
- Position the sensor close to the main unit during cold winter months as below-freezing temperatures may affect battery performance and signal transmission.

TIP Ideal placements for the sensor would be in any location on the exterior of the home at a height of not more than 1.5m (5 ft) and which can shield it from direct sunlight or wet conditions for an accurate reading.

CLOCK

CLOCK RECEPTION



This product is designed to synchronize its clock automatically with a clock signal.

RRM902: EU: DCF-77 signal: within 1500km (932 miles) of Frankfurt, Germany.

RRM902U: UK: MSF-60 signal: within 1500km (932 miles) of Anthorn, England.

RRM902A: US: WWVB-60 signal: within 3200km (2000 miles) of Fort Collins, Colorado.

To enable / disable signal reception:

Press and hold  **VOL+** to enable, or  **VOL-** to disable signal reception.

NOTE Reception takes 2-10 minutes. If the signal is weak, it can take up to 24 hours to get a valid signal.

If signal reception is unsuccessful, place your unit next to a window, press and hold  **VOL+** to force another signal search.

Clock signal reception indicator:

STRONG SIGNAL	WEAK / NO SIGNAL
	

MANUALLY SET CLOCK

To set the clock manually, disable the clock signal reception first.

1. Press and hold .
2. Press  **VOL+** or  **VOL-** to change the settings.
3. Press  to confirm.

The setting order is: time zone offset, 12/24-hour format, hour, minute.

RMR902 / RMR902U: Time zone offset sets the clock +/- 23 hours from the received clock signal time. If you have deactivated the clock signal reception, do not set a value for time zone.

NOTE If you enter +1 in the time offset setting, this will give you your local time plus one hour. If you are in the US (RRM902A) set the clock to:

0 for Pacific time +1 for Mountain time
+2 for Central time +3 for Eastern time

AUDIO OPTIONS

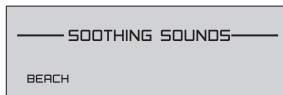
SOOTHING SOUNDS


To activate / deactivate soothing sounds:

- Place finger on **SNOOZE·SOUND** for 2 seconds.

To toggle soothing sounds:

- Touch **SNOOZE · SOUND** repeatedly to select desired sound (1-8).




The selected sound name and  will be displayed.

NOTE This will automatically turn off the radio.

RADIO

To activate / deactivate radio:



- Press  to turn radio ON / OFF.

The radio station selected  with corresponding frequency and  will be displayed when radio is on.




NOTE This will automatically turn off the soothing sound.

To set radio station:

1. Press  to turn radio on.
2. Press  repeatedly to navigate to desired station storage location (1-8).
3. Press and hold **TUNE+ / TUNE-** to auto search or press **TUNE+ / TUNE-** to manually select frequency. Station number will disappear []




- Once desired frequency has been found, press and hold  to save. Station number (e.g., **[E]**) indicates where it has been stored.
- Repeat steps 2 – 4 for all storage locations.


For your convenience, the volume and radio frequency will be stored in memory for the next time radio is turned on.

To view alarm display (when radio is on):

- Press .

MUSIC FROM EXTERNAL AUDIO DEVICE

Using a cable, plug one end to your music storage device and one end to audio line-in socket () located at the back of unit.

When cable has been successfully connected,  will be displayed on the LCD screen and sound will emit from speakers.

NOTE





- To play music from external audio device, ensure soothing sound and radio is turned off.
- Connecting / disconnecting of external audio device will turn the alarm off.



VOLUME CONTROL

- Press  **VOL+** or  **VOL-**.




ALARM

To set the alarm:

- Press and hold .
- Press  **VOL+** or  **VOL-** to change the settings.
- Press  to confirm.

The setting order is: Hour, minute, alarm option ( soothing sound / beep or  Radio), sound type (1-8: soothing sound, 9: beep) or radio station, volume (cannot be adjusted for beep alarm).

To toggle alarms ON / OFF:

- Press  to display alarm time.
 - Press  again to turn alarm ON / OFF.
-  indicates alarm is on.

To silence the alarm:

- Touch **SNOOZE · SOUND** to silence it for 8 minutes
- OR
- Press any other key (except **DIMMER**) to turn the alarm off and activate it again after 24 hours.

COLOR PLAY

To activate light show (looped):

- Slide **COLOR** switch to LOOP.

To stop light show at a particular color:

- Press **PAUSE** when it reaches desired color.

Press **PAUSE** again to restart loop.

Each soothing sound is programmed with a unique color-changing light show which complements the music, improves the ambience and adds a decorative touch to any room.

To start programmed light show:

- Slide **COLOR** switch to PROGRAM.

To deactivate light show:

- Slide **COLOR** switch to OFF.

SLEEP TIMER

To activate audio sleep timer:

- Press **SLEEP** to activate sleep timer.

Z² indicates sleep timer is on.

NOTE

- If neither soothing sound nor radio is activated when **SLEEP** is pressed, the unit will automatically activate the last audio type played.

- If either soothing sound or radio is playing when **SLEEP** is pressed, the unit will start counting down sleep timer and continue playing audio type.

To select duration:

- Press **SLEEP** repeatedly.

To view time remaining:

- Press **SLEEP**.

NOTE If external audio device is plugged in while sleep timer is on (and radio / soothing sound is not playing), OFFZ² will be displayed briefly to indicate sleep function has been temporarily disabled.

TEMPERATURE

To toggle temperature unit:

- Press °C / °F.

BACKLIGHT

To adjust brightness:

- Press **DIMMER**.

RESET

Press **RESET** to return to the default settings.



SPECIFICATIONS

TYPE	DESCRIPTION
Main unit	
L x W x H	155 x 43 x 145 mm (6.1 x 1.7 x 5.7 in)
Weight	526 g (18.6 oz) without battery
FM	87.5 to 108 MHz
Power	4.5V adapter and 1x CR2032 for memory back-up
Remote Sensor (THN132N)	
L x W x H	92 x 60 x 20 mm (3.6 x 2.4 x 0.8 in)
Weight	62g (2.22 oz)
Transmission range	30m (98 ft) unobstructed
Frequency	433 MHz
Temperature range	-30°C to 60°C (-22°F to 140°F)
Power	1 x UM-3 (AA) 1.5V battery

PRECAUTIONS

- Do not subject the unit to excessive force, shock, dust, temperature or humidity.
- Do not cover the ventilation holes with any items such as newspapers, curtains etc.
- Do not immerse the unit in water. If you spill liquid over it, dry it immediately with a soft, lint-free cloth.

- Do not clean the unit with abrasive or corrosive materials.
- Do not tamper with the unit's internal components. This invalidates the warranty.
- Only use fresh batteries. Do not mix new and old batteries.
- Images shown in this manual may differ from the actual display.
- When disposing of this product, ensure it is collected separately for special treatment and not as normal household waste.
- Placement of this product on certain types of wood may result in damage to its finish for which Oregon Scientific will not be responsible. Consult the furniture manufacturer's care instructions for information.
- The contents of this manual may not be reproduced without the permission of the manufacturer.
- Do not dispose old batteries as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
- Please note that some units are equipped with a battery safety strip. Remove the strip from the battery compartment before first use.

NOTE The technical specifications for this product and the contents of the user manual are subject to change without notice.

NOTE Features and accessories will not be available in all countries. For more information, please contact your local retailer.

ABOUT OREGON SCIENTIFIC

Visit our website (www.oregonscientific.com) to learn more about Oregon Scientific products.

If you're in the US and would like to contact our Customer Care department directly, please visit: www2.oregonscientific.com/service/support.asp

For international inquiries, please visit:

www2.oregonscientific.com/about/international.asp

EU DECLARATION OF CONFORMITY

Hereby, Oregon Scientific, declares that this Rainbow Clock with 8 Soothing Sounds and FM Radio (Model: RRM902 / RRM902U / RRM902A) is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the signed and dated Declaration of Conformity is available on request via our Oregon Scientific Customer Service.



COUNTRIES RTTE APPROVAL COMPLIED

All EU countries, Switzerland 

and Norway 

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

WARNING Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.



2

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

not cause harmful interference. 2) This device must accept any interference received, including interference that may cause undesired operation.

DECLARATION OF CONFORMITY

The following information is not to be used as contact for support or sales. Please visit our website at www2.oregonscientific.com/service for all enquiries.

We

Name: Oregon Scientific, Inc.
Address: 19861 SW 95th Ave., Tualatin,
Oregon 97062 USA
Telephone No.: 1-800-853-8883

declare that the product

Product No.: RRM902 / RRM902U / RRM902A
Product Name: Rainbow Clock with 8 Soothing Sounds and FM Radio
Manufacturer: IDT Technology Limited
Address: Block C, 9/F, Kaiser Estate,
Phase 1, 41 Man Yue St.,
Hung Hom, Kowloon,
Hong Kong

is in conformity with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) This device may